



Original communication

Child homicide in Cairo from 2006 to 2010: Characteristics and trends



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ABSTRACT

Background: Crimes towards children have drawn public attention over the decades. Several studies have been conducted to determine the risk factors of victimizing children. Conducting studies of this crime in Cairo, the capital city of Egypt, would help in understanding the motives behind it in such a densely populated area.

Research design and methodology: A review of death charts was conducted in Zeinhom morgue in the years of 2006–2010 to study the trends and characteristics of child homicide in Cairo. The cut-off for a child age was at 18 years. Data related to the victim and offender was collected.

Results: Child homicides represented 7.97% of total child deaths in the studied period. Most of them (25%) fall in the age group of 1–6 years. Females were the majority in the age group of 12–18 years (89%). The offender was the father in 28% of cases and the cause of death was mainly trauma to the head (42%).

Conclusion: Further studies should be conducted to discern the risk factors of this crime in Cairo with special considerations to the motives behind murdering females in teen ages.

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1. Introduction

History has witnessed cases of child homicide across all cultures and social levels.¹ This issue has drawn public attention over time as it has created social and legal problems that challenge both forensic pathologists as well as the legal authorities.²

In the case of child homicides, there is a need for answers to specific questions to be able to determine the cause and manner of death. Such questions include: who is the potential victim? Who should be initially investigated as a possible perpetrator? What is

the common initial history given by the caregiver? What is the usual cause of death in such crimes?³

Most child homicide cases occur at home, where the only witness is the caregiver. The role of the forensic pathologist here is to help in reconstructing the event without solely relying on the autopsy findings.⁴

Usually the incident responsible for death is inflicted only once.⁴ The motives and methods vary with different civilizations and include economical, educational, political and ideological reasons.⁵ The majority of offenders are known to the child and are usually relatives.⁶ The cause of death is mainly head injury, followed by drowning and suffocation.⁷

The city of Cairo is densely populated and considered the 10th largest mega city in the world.⁸ The issue of child homicide needs to

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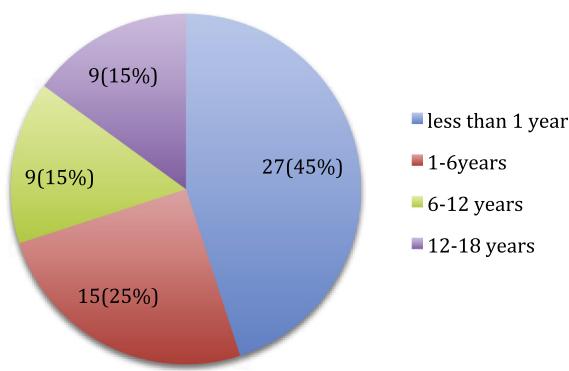


Fig. 1. Number of child homicides according to age group.

be studied in such a large population. The aim of this study is to determine the characteristics and trend of child homicidal death in Cairo.

2. Methodology

A retrospective chart review was conducted in the city of Cairo from the year 2006–2010. Death records in Zeinhom morgue (where all suspicious deaths in the city of Cairo are autopsied) were reviewed and the cut-off for a child age was at 18 years. The ages of children were classified into 4 groups: <1 year, 1–6 years, 6–12 years, and 12–18 years. Data obtained included age, sex, used tools, external and/or internal findings, cause of death, and time of death after injury. The offender and his/her relation to the victim were documented. The mode of death was considered homicide based on autopsy findings in the context of circumstantial evidence.

3. Results

A total of 3981 death records were reviewed and 752 corresponded to child death. Out of these child deaths, 60 cases (7.97%) were child homicides.

Most of the cases involved children less than 1 year (27, 45%), followed by those of 1–6 years (15, 25%) (Fig. 1). Females in general (32, 53%) were slightly more numerous than males (28, 46%). At 12–18 years of age, the number of females (8, 89%) was significantly higher than that of males (1, 11%) (Fig. 2).

Inflicted trauma was mostly due to blunt weapons (37, 43%), followed by hand (slapping and punching) (22, 26%). In some cases, more than one tool was used to inflict injuries on the victim (Fig. 3).

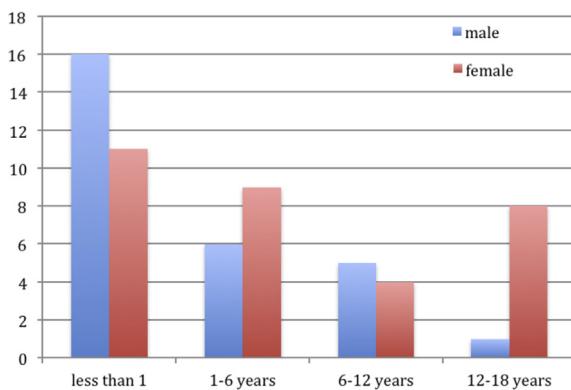


Fig. 2. Number of child homicides according to age and sex.

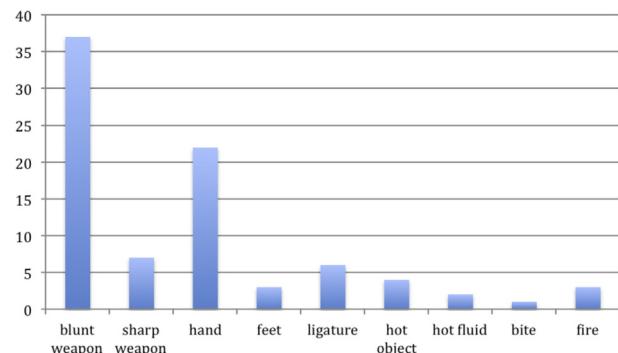


Fig. 3. Tools used to cause injuries in cases of child homicide.

Contusions were the most frequently documented external findings in 43 cases (59%) followed by abrasions in 12 cases (16%). External injuries were absent in 14 cases (23%) (Table 1).

Internal injuries were mostly intracranial (41, 73%), followed by visceral injuries (9, 15%), fractured ribs (5, 8%) and fractured extremities (1, 2%). Most of the cases (38, 63%) died on scene; 7 cases (12%) died on arrival to the hospital or during treatment within 24 h of inflicted trauma and 15 cases (25%) died more than 24 h after trauma. The cause of death was most commonly due to trauma to the head (25, 42%). Neglect was the cause of death in 12 cases (20%); there were signs of dehydration documented in 11 of them. Drowning was the cause of death in one case.

In some cases, there was more than one offender. The father was a perpetrator in 18 cases (30%) followed by the step father in 12 (20%) and the mother in 10 (17%). In 20 cases (33%), the offender was unidentified or a stranger (Fig. 4).

4. Discussion

This study was conducted to analyze the characteristics of child homicide in the city of Cairo.⁸ Although the relation between density of population and level of crime has not yet been established, it is important to determine other factors that represent a risk for homicides.⁹

The percentage of child homicide cases was comparable to other areas of the world.² The study showed that child victims mostly fall in the age group of below one year, which is consistent with previous studies.^{3,10,11} Young children are completely dependent on their caregiver and so continuous care is needed, leading to frustration and anger from the caregiver. These children still cannot verbalize and, unlike the older age groups, they cannot defend themselves, which makes them more vulnerable targets.¹²

Sex differences were not apparent in lower age groups, which was similar to other studies that showed an equal distribution or a slight increase towards males.^{3,12,13} However, there was an apparent difference towards females in the age group of 12–18 years. This is in contrast to other studies that showed the opposite, where male

Table 1
Documented external injuries.

Type of external injury	No.	%
Contusion	43	59.7%
Abrasions	12	16.6%
Burn	7	9.7%
Ligature mark	5	6.9%
Cut wound	3	4.2%
Stab wound	2	2.8%
Total	72	100%

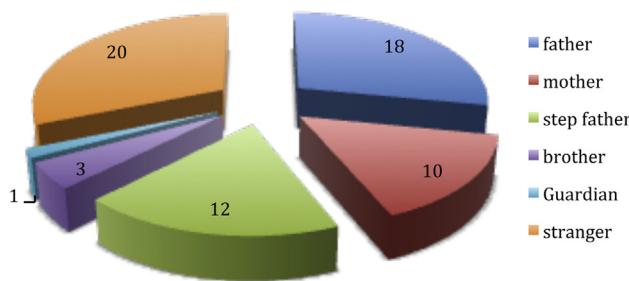


Fig. 4. The relation of offenders to murdered children.

teenagers were the targets. This was explained by the high-risk activities that males indulge in like drugs and gang involvement.^{12,14} Part of this increase in females of this age group could be explained by the rape homicides.

A study in North Carolina on 90 adolescent murdered girls showed that sexual assault or rape was found in 19%.¹⁵ This can by no means be diagnosed based on autopsy findings alone, as normal genital findings in children and adolescents do not exclude a history of sexual abuse or a consensual sexual act.¹⁶ Another study was conducted in South Africa and showed that 16% of female homicides were suspected rape homicides. They found that although genital injuries were found at postmortem examination, other predictors like position of body at scene, condition of clothing, and evidence of sexual assault should be looked for prior to examination in order to treat the case as a potential rape homicide. However, no protocols have yet been set for forensic examiners to prevent evidence loss in homicidal rape cases.¹⁷ In Zeinhom morgue, it is not a routine to conduct genital examination in cases of child homicides, especially if there was no suspicion of sexual assault and the reviewed records do not contain any details of scene investigation. Hence, nothing could be retrieved that could point to the case as being a rape case.

Blunt weapons were the tools most often used, followed by the hands. This confirms the findings of other studies where the offender, who was usually a family member, used hands or feet to hit the child, especially in children below the age of five.^{6,10,12} This was attributed to the feasibility of such weapons as fists and other body parts.² Bruises and abrasions were the commonest external findings and this is expected from these types of commonly used weapons. As in previous studies, head trauma was the cause of death in most of the cases and intracranial injuries were a common finding.^{2,3,14,18}

Cases of neglect represent 20% of the total cases. These should be meticulously investigated in order to exclude other mimicking conditions of failure to thrive. Death in cases of neglect is mainly due to malnutrition, starvation, and/or dehydration. Analysis of vitreous fluid for electrolytes and urea nitrogen is essential to identify dehydration, while radiography is important to determine bone demineralization in cases of malnutrition.¹⁹

Most of the children were found dead at scene. Usually the injuries that cause death in child homicides are inflicted at a single event⁴ and death usually occurs in few minutes to hours from infliction of injury.³ This is expected in cases of trauma to the head where the severity of the inflicted injury does not allow time for rescuing the child.

The victims usually knew the offenders,²⁰ and parents represented the majority of them. Parents have been killing their children in every culture since the beginning of time, mothers and fathers share the same percentage.^{13,21} Mothers tend to kill their children as a second choice after their husbands.²⁰ It has been said that mothers kill their children to destroy what they created, while

fathers kill them to break their mother's hearts.¹³ Unidentified offenders or strangers tend to murder children below the age of 12 years more than they do teenagers.¹²

Although Egypt, along with other Middle Eastern and developed countries, showed an average rate of homicides much lower than the rest of the world,⁹ there should be more studies of such crime to determine the risk and contributing factors in order to help set preventive strategies. It is recommended that specific studies be conducted on teenage females to find the motivations behind their murders.

These cases should be considered for genital examination and details of scene should be obtained in order to determine the need for further investigations of possible sexual assault.

The study is a retrospective study, which has the limitation of lacking many details of post mortem examination as well as circumstances of death. It is recommended that death records in Zeinhom morgue be revised with consideration of standardizing the way of documentation that would benefit for future research studies.

Ethical approval

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Conflict of interest

No conflicts of interest.

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